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THE SUMMER BIRDS OF SUSQUEHANNA COUNTY, PENNSYLVANIA.

BY FRANCIS R. COPE, JR.¹

Since the publication of Dr. Dwight's paper on the "Summer Birds of the Crest of the Pennsylvania Alleghenies," (*Auk*, IX, April, 1892), and Mr. Stone's on the "Summer Birds of Harvey's Lake, Luzerne County, Pennsylvania," (*Proc. Acad. Nat. Sci. Phila.*, 1891, pp. 431-438)² no detailed account has appeared of the summer birds of the northeastern part of the State, although it has generally been supposed that the fauna of this region partook largely of the nature of the North Mountain district, with perhaps a slightly stronger tinge of the Canadian element. Indeed, on the faunal map attached to Mr. Stone's volume on the "Birds of eastern Pennsylvania and New Jersey"³ almost the whole of Susquehanna County is included in what is known as the Canadian fauna.

The present paper, based on several years study of the birds of the county, and including only such species as have been observed during the breeding season, say from June 15th to the second week in July, shows, I think, that the fauna of Susquehanna County, although it has a strong tinge of this Canadian element, possesses it to a less marked degree than the mountainous region further south. This fact may doubtless be accounted for by the absence of any very extensive hemlock forests, such as those found around Harvey's Lake and on North Mountain.

Reference to a map will show that Susquehanna County is situated in the northeastern part of Pennsylvania, between latitude 41° 40' and 42°. It is part of the Allegheny and Pocono plateaux, and may be described as a hilly, rocky country, interspersed with innumerable small valleys. With the exception of many small

¹ Read before the Delaware Valley Ornithological Club at the Academy of Natural Sciences of Philadelphia.

² Since the above was written, a paper has been published bearing on this subject, entitled "Summer Birds of northern Elk County, Pennsylvania," by William L. Baily, (*Auk*, XIII, October, 1896).

³ "Birds of eastern Pennsylvania and New Jersey," by Witmer Stone, published by the D. V. O. Club, Philadelphia, 1894.

lakes and ponds, the land is poorly watered, there being but few streams of any size. A spur of the Alleghenies extends through the southeastern corner, terminating in Elk Mountain, which last rises to an altitude of about 3,000 feet and is almost the only eminence in the county worthy of the name of mountain, the other hills not rising much above 2,000 feet. The vast tracts of forest, which fifty years ago covered the greater part of the county, now everywhere bear witness to the ravages of axe and fire, and are broken up into isolated patches. Among the principal forest trees may be mentioned the Beech, Maple, Hemlock, Chestnut, Birch, and Pine, the last mentioned being, perhaps, the least plentiful of the six. Of these species the Hemlock has doubtless suffered the most, being particularly prized for its bark ; nevertheless it is still found in considerable numbers interspersed among the other trees.

It is in these small, but numerous tracts of primeval forest which yet remain uncut, that we find most of the truly Canadian species. Here such northern birds as Black-throated, Blue, Canadian, Magnolia and Blackburnian Warblers, Water Thrushes, Solitary Vireos and Hermit Thrushes are all more or less common, some being abundant, but they are almost entirely confined to the deep woods, especially where there is a thick growth of hemlock. Of other Canadian species, the Junco seems to be generally confined to the open clearings and pastures bordering on woodland, and is decidedly rare, Elk Mountain being the only locality where it has been found breeding in any numbers. Even here, however, where during the latter part of June, 1894, I found upward of a dozen pairs breeding at an altitude of 2,600 feet, not a single bird was observed on a second visit, July 2, 1897. Winter Wrens are conspicuous by their absence, although there seems to be no good reason why this species should not occur plentifully, unless it be owing to the absence of any very extensive hemlock forests, as before remarked. My only reason for mentioning them in this paper is that during the first week in July, 1897, I twice heard a song in the depths of a hemlock forest near Dimock, which, although I am not familiar with the bird, I felt almost sure was the note of a Winter Wren. This would seem to point at least to the possibility of its breeding.

In the open land throughout the greater part of the county, especially in moist upland meadows, Savannah Sparrows are very common, generally breeding in small colonies ; while at Dundaff, in the southeastern portion, in open fields at an altitude of some 2,000

feet, the Bobolink is an abundant breeder, also occurring locally at many points in the central and eastern part of the county.

As to the occurrence of several species of water birds during the breeding season in Susquehanna County, I can state nothing positive, not having visited several of the more retired lakes and streams in the northwestern portion of the county, where they would be most likely to be found.

To sum up, I think it may be said that the fauna of Susquehanna County is largely Alleghenian, with a strong tinge of the Canadian, but with practically nothing of what may be regarded as belonging exclusively to the Carolinian element. To be sure, Dr. Warren (*Birds of Pennsylvania*, p. 300) mentions having taken a Hooded Warbler in the county during the summer months, while on August 10, 1895. I shot a pair of adult Prothonotary Warblers near Dimock, but these species can hardly be regarded as more than stragglers.

In the following list I have made no mention of the birds breeding, as with few exceptions all the individuals noted during the last of June and early part of July may reasonably be assumed to be summer residents and to be breeding in the locality where seen.

Such species as have not come under my personal observation or whose status as breeders may be doubtful, have been placed in brackets.

Before concluding, I desire to express my thanks to Mr. Witmer Stone, of the Academy of Natural Sciences of Philadelphia, who visited the county in June 1896 and 1897, and who has rendered valuable assistance in many ways.

[1. *Aix sponsa*. Wood Duck.

Formerly a common breeder in the more retired lakes and streams, but now decidedly rare. A pair seen during the early part of August, 1895, near a wild overgrown pond in the vicinity of Dimock only points to the probability of its breeding].

2. *Ardea herodias*. Great Blue Heron.

Rare. Scattered pairs occasionally seen along the larger streams throughout the county.

3. *Ardea virescens*. Green Heron.

Tolerably common, but like the last never found breeding in colonies, there being generally but a single pair in one locality. The birds, however, show great partiality for the old breeding grounds, and generally return to the same spot year after year.

4. *Nycticorax nycticorax naevius*. Black-crowned Night Heron.

This species has been observed but rarely during the breeding season, though there seems to be no reason why it should not be plentiful.

5. *Philohela minor*. American Woodcock.

Rather common, but yearly becoming scarcer as a breeder.

6. *Bartramia longicauda*. Bartramian Sandpiper.

One bird observed in an upland pasture near Dimock, June 19, 1897, and evidently breeding from its actions, is my only record for the county.

7. *Actitis macularia*. Spotted Sandpiper.

Common in all suitable localities.

8. *Colinus virginianus*. Bob-white.

Much less common now than formerly, but solitary individuals and an occasional covey are still frequently met with. During the last two years, however, there has been a noticeable increase in the numbers of this bird throughout the county.

9. *Bonasa umbellus*. Ruffed Grouse.

More plentiful than *C. virginianus*, but fast becoming rarer as the forests are cut away, thus depriving it of suitable breeding grounds and hiding places.

[10. *Ectopistes migratorius*. Passenger Pigeon.

A flock of four was seen July 19, 1897, in a dead chestnut tree on the edge of a strip of woodland near Dimock. Although I had a good look at the birds through my glass and feel no reasonable doubt as to the identity, I was unfortunately unable to secure any of them. This species is known to have formerly been an abundant breeder in Susquehanna County, but these are the first individuals seen for many years. This occurrence at this season of the year may possibly indicate that they still nest occasionally in the wilder parts of the county].

11. *Zenaidura macroura*. Mourning Dove.

This species, which may be regarded as common to the Alleghenian and Carolinian zones, though perhaps more typical of the latter, is not uncommon in some localities, although decidedly rare in others.

12. *Circus hudsonius*. Marsh Hawk.

The county is seemingly far too hilly and mountainous to suit the habits of this hawk, but nevertheless a pair has been seen regularly during June and July for several years past on a small marshy meadow surrounding Elk Lake, and doubtless breeds there.

13. *Accipiter velox*. Sharp-shinned Hawk.

Rather common, being frequently met with during the breeding season.

14. *Accipiter cooperi*. Cooper's Hawk.

Rare and much less common than the preceding.

15. *Buteo borealis*. Red-tailed Hawk.

Decidedly the most abundant hawk in the county, a few being seen almost daily.

16. *Buteo lineatus*. Red-shouldered Hawk.

Probably ranks next to *B. borealis* in abundance.

17. *Falco sparverius*. Sparrow Hawk.

Rather common.

[18. *Syrnium nebulosum*. Barred Owl.

The only record which I have of the occurrence of this owl in summer time is an adult male shot by a friend during the latter part of August, 1897. It may doubtless be regarded as a rare permanent resident].

19. *Megascops asio*. Screech Owl.

Common resident.

20. *Bubo virginianus*. Great-horned Owl.

Tolerably common resident in the deeper forests throughout the county.

21. *Coccyzus erythrophthalmus*. Black-billed Cuckoo.

Not uncommon, during the breeding season.

22. *Ceryle alcyon*. Belted Kingfisher.

Tolerably common along the banks of ponds and streams, being especially abundant at Silver Lake in the northwestern part of the county.

23. *Dryobates villosus*. Hairy Woodpecker.

Common throughout the wooded portions.

24. *Dryobates pubescens*. Downy Woodpecker.

Abundant and generally distributed, both in the woodland and in the open country.

- [25. *Geophlœus pileatus*. Pileated Woodpecker.

Personally I have never observed this species during the breeding season, but as several specimens have been taken during the early part of August, it doubtless breeds sparingly].

26. *Melanerpes erythrocephalus*. Red-headed Woodpecker.

Rare. A pair was observed at Dundaff, June, 1895, and a single bird near Montrose in June, 1896.

27. *Colaptes auratus*. Flicker.

Abundant everywhere.

28. *Antrostomus vociferus*. Whip-poor-will.

Very rare, having been only once or twice noted in low, secluded spots.

29. *Chordeiles virginianus*. Night Hawk.

Very common, collecting in large flocks during August.

30. *Chaëtura pelagica*. Chimney Swift.

Abundant, breeding throughout the county. It has, however, adapted itself to the ways of civilization and has never been observed nesting in hollow trees.

31. *Trochilus colubris*. Ruby-throated Humming-bird.

Common, both about houses and in the deep woods.

32. *Tyrannus tyrannus*. Kingbird.

Abundant and generally distributed.

33. *Myiarchus crinitus*. Great-crested Flycatcher.

Tolerably common throughout the county.

34. *Sayornis phoebe*. Phoebe.

Abundant everywhere in the open country.

35. *Contopus virens*. Wood Pewee.

Fully as abundant as the preceding species, but confined to orchards and woodlands.

36. *Empidonax minimus*. Least Flycatcher.

Very common and universally distributed during the breeding season.

37. *Otocoris alpestris praticola*. Prairie Horned Lark.

Although this species has been recorded during the breeding season by Messrs. Dwight and Parke at Athens, Bradford County, at Williamsport (Koch), and in Elk County (Baily), it has never, to my knowledge, been observed in this county until the summer of 1896, when a bird was noted July 6, in a grassy meadow near Dimock.

38. *Cyanocitta cristata*. Blue Jay.

Abundant, especially in woody situations.

39. *Corvus americanus*. American Crow.

Abundant.

40. *Dolichonyx oryzivorus*. Bobolink.

A common breeder, but decidedly local in its distribution, although isolated pairs may be found in all suitable localities throughout the county. At Dundaff, a small village in the southeastern part, at an elevation of 1,620 feet, upward of two dozen pairs were found breeding in June, 1895, while a small colony generally nests in some upland meadows near Dimock.

It may also be of interest to note that two pairs of this species were observed at Waymart, Wayne County, Pennsylvania, June 22, 1895, and four pairs near Sugarloaf Mountain on the western border of the same county, June 23, 1897.

41. *Molothrus ater*. Cowbird.

Rather common.

42. *Agelaius phoeniceus*. Red-winged Blackbird.

Locally common, breeding plentifully on the marshes of several lakes near Dimock, where I have taken fresh eggs as late as the first of July.

43. *Sturnella magna*. Meadow Lark.

Very common and generally distributed.

44. *Icterus galbula*. Baltimore Oriole.

Common about houses and generally distributed, apparently increasing in abundance.

45. *Quiscalus quiscula aeneus*. Bronzed (?) Grackle.

While on a collecting trip with Mr. Witmer Stone in the northwestern part of the county, June 22, 1897, a single Grackle was observed, presumably *Q. q. aeneus*. Unfortunately neither of us was

able to secure the bird; but from its actions it was undoubtedly nesting in the neighborhood. This record seems interesting as being the first evidence, to my knowledge, of the occurrence of any species of Grackle in Susquehanna County.

46. *Carpodacus purpureus*. Purple Finch.

Not uncommon, both in the woodland and in the open country about houses, where its pretty song may be heard from April to the middle of July.

47. *Passer domesticus*. English Sparrow.

This pest, everywhere rapidly increasing in numbers, and now resident in almost every town and village of any size throughout the county, bids fair to soon drive away all the old feathered songsters from our gardens and orchards.

48. *Spinus tristis*. American Goldfinch.

Abundant everywhere.

49. *Poocætes gramineus*. Vesper Sparrow.

The most abundant and generally distributed of the sparrows during the breeding season; in fact, one of the characteristic birds of the open country.

50. *Ammodramus sandwichensis savanna*. Savannah Sparrow.

Very common and widely distributed in all suitable localities, especially in the northern and eastern portions of the county.

51. *Ammodramus savannarum passerinus*. Grasshopper Sparrow.

Common in dry uplands.

52. *Spizella socialis*. Chipping Sparrow.

Abundant.

53. *Spizella pusilla*. Field Sparrow.

Abundant in open fields and overgrown pastures.

54. *Junco hyemalis*. Slate-colored Junco.

Formerly common at Elk Mountain, from 2,000 feet up, and generally confined to open fields, but now quite rare. Its occurrence in the rest of the county is limited to two records: First, a single pair shot June 26, 1896, near Dimock, and secondly, another pair engaged in constructing a nest near the same locality, April 24, 1897. One would expect to find this species in the elevated plateau land of Ararat township, on the eastern border of the county, a locality well suited to its habits; but on a visit to this region in

June, 1897, I did not meet with a single individual, although it was found three miles to the eastward, on Sugarloaf Mountain, in Wayne County.

55. *Melospiza fasciata*. Song Sparrow.

Abundant everywhere, except in the deep woods.

56. *Melospiza georgiana*. Swamp Sparrow.

Rather common in low swampy situations.

57. *Pipilo erythrophthalmus*. Towhee.

Tolerably common in scrubby fields and clearings.

58. *Zamelodia ludoviciana*. Rose-breasted Grosbeak.

This species seems to be very rare, having only been observed once during the breeding season, when a fine male was shot June 22, 1896, in an old clearing near Dimock.

59. *Passerina cyanea*. Indigo Bird.

Abundant, especially in briar patches and clearings, where the males may be heard singing all day long.

60. *Piranga erythromelas*. Scarlet Tanager.

Very common throughout the deep woods.

61. *Petrochelidon lunifrons*. Cliff Swallow.

Common, but rather local in its distribution, and generally found breeding in colonies. It has of late years been gradually decreasing in abundance.

62. *Chelidon erythrogaster*. Barn Swallow.

More abundant and generally distributed throughout the county than the preceding species.

63. *Tachycineta bicolor*. Tree Swallow.

Rare. Scattered pairs occasionally seen in suitable localities.

64. *Ampelis cedrorum*. Cedar Bird.

Common summer resident, occurring in large flocks during June and again in September.

65. *Vireo olivaceus*. Red-eyed Vireo.

Very abundant, both in the shade trees about houses and in the deep woods.

66. *Vireo gilvus*. Warbling Vireo.

A nest with three young, collected by Mr. Stone and myself near Milford, June 22, 1897, is the only record which I have of its occurrence in Susquehanna County.

67. *Vireo flavifrons*. Yellow-throated Vireo.

Not uncommon, being frequently met with during the breeding season, especially in the deep woods.

68. *Vireo solitarius*. Blue-headed Vireo.

Common in the deep forests throughout the greater portion of the county, one or more pairs being usually met with in all the larger pieces of woodland. Two adults with young just out of the nest and not yet able to fly were observed July 8, 1896, about two miles south of Springville.

69. *Mniotilta varia*. Black and White Warbler.

Tolerably common in second growth woods and clearings.

70. *Compsothlypis americana*. Parula Warbler.

Not uncommon, and several times met with in woods where there is apparently no usnea moss. It would be interesting to know what the bird constructs its nest of in such localities.

71. *Dendroica aestiva*. Yellow Warbler.

Common throughout the open country.

72. *Dendroica caerulescens*. Black-throated Blue Warbler.

Abundant and generally distributed in the deep hemlock woods, being, perhaps, the commonest representative of its genus.

73. *Dendroica maculosa*. Magnolia Warbler.

Another very common species, almost as plentiful as the preceding, but like it confined to the deep hemlock woods.

74. *Dendroica pennsylvanica*. Chestnut-sided Warbler.

Common, but confined to the clearings and tracts of 'scrub.' A nest together with the brood of young birds was discovered June 27, 1896, in a small orchard within a few yards of the house.

75. *Dendroica blackburniæ*. Blackburnian Warbler.

Abundant wherever there is a thick growth of hemlock. It would be hard to say whether this species or *D. caerulescens* is the more plentiful, for as Dr. Dwight remarks, there are "places where both might almost be said to swarm."

76. *Dendroica virens*. Black-throated Green Warbler.

Also abundant in the deep hemlock forests, but hardly as plentiful as the preceding species.

77. *Seiurus aurocapillus*. Oven-bird.

Abundant everywhere.

78. *Seiurus noveboracensis*. Water Thrush.

This typical Canadian species seems to be decidedly rare, the only record for the county being one immature female shot June 26, 1896. This bird was secured in a dense swamp containing a sparse growth of rhododendron, and had evidently been out of the nest but a short time.

79. *Geothlypis trichas*. Maryland Yellow-throat.

Very common, but confined to clearings and open grounds, and seldom noted in the deep woods.

80. *Sylvania canadensis*. Canadian Warbler.

Another species belonging to the Canadian fauna, and one almost as abundant as *D. caerulescens*. It is found throughout the county, in the lower and damper portions of the deep forests, generally, but not always, where there is a thick growth of hemlock.

Personally I have never detected the Redstart (*Setophaga ruticilla*) during the breeding season in this county, but during the latter part of June, 1895, I found it to be very common in portions of Wayne County and at Lake Teedyuskung, Pike County.

81. *Galeoscoptes carolinensis*. Catbird.

A common species in the open country.

82. *Harporhynchus rufus*. Brown Thrasher.

Rather rare in the central and northern parts of the county, increasing in abundance toward the southern border. Observed only in scrubby fields and clearings.

83. *Troglodytes aedon*. House Wren.

Tolerably common about houses.

[84. *Troglodytes hyemalis*. Winter Wren.

Very rare. As previously remarked, the song has been detected several times during the early summer in the deep hemlock woods near Dimock, and leads me to think that it probably breeds sparingly in the wildest portions of the county].

The Brown Creeper, *Certhia familiaris americana*, although recorded by Messrs. Dwight, Baily and Stone from Sullivan, Elk and Luzerne Counties respectively, has never been observed by me in Susquehanna County during the breeding season, and if it does occur, must be regarded as a very rare summer resident.

85. *Sitta carolinensis*. White-breasted Nuthatch.

Very common, both in the woods and in the open country.

86. *Parus atricapillus*. Black-capped Chickadee.

Abundant in the woodland.

87. *Turdus mustelinus*. Wood Thrush.

A common species and generally confined to the deep woods. A nest containing young nearly ready to fly was discovered, however, June 18, 1895, situated in a young maple tree on the border of the woods within a few rods of the house. The female bird was exceedingly tame, allowing approach within a foot of the nest, but usually this species lacks much of the tameness and confidence which so characterizes it in the more densely populated portions of the country.

88. *Turdus fuscescens*. Wilson's Thrush.

Very abundant in dense, swampy woodland throughout the county. Owing to its shyness and the inaccessibility of the localities which it generally inhabits, the bird is very difficult to approach, but its presence is always betrayed by its wild bell-like notes, which may be heard at all hours of the day, but which sound the sweetest in the early morning and about sunset. It is almost impossible to imitate the song on paper, but the syllables "ta-weel'ah, ta-weel'ah, twil'ah, twil'ah," mentioned in Baird, Brewer and Ridgway's *North American Birds* (Vol. I, p. 9), convey to my ear the most accurate description of it which I have seen. After careful observation and study, I am prepared to say that this is one of the most plentiful of the *Turdidæ* in Susquehanna County, surpassing in abundance both *T. mustelinus* and *pallasii*.

89. *Turdus aonalaschkæ pallasii*. Hermit Thrush.

Tolerably common wherever the hemlock remains uncut, but hardly as plentiful as *T. mustelinus*, being absent in many of the localities where the latter is comparatively common. I have, on many occasions, however, observed the two species singing almost side by side, and fully agree with other observers that the song of the Hermit is considerably superior to that of the Wood Thrush, possessing as Dr. Dwight remarks, "a ringing sweetness that is only matched in part by the latter."

90. *Merula migratoria*. American Robin.

Common everywhere throughout the county, except in the deep woods.

91. *Sialia sialis*. Bluebird.

Rather common, but gradually becoming less plentiful as a summer resident. During the spring, summer and autumn of 1895, not a single individual was observed anywhere in the county, but during June and July, 1896, several broods were noted, while in 1897 the species was quite common again.